

9.0 MISCELLANEOUS

9.1 RS-232 input

Communication Specifications

Control of this unit is possible using a computer or automation device connected with a RS-232 straight cable (male - female D-sub 9 pins cable). Communication specifications for this unit are as follows:

Baud Rate	115200 bps
Data Format	Binary
Character Length	8 bits
Parity	None
Stop Bit	1 bit
X on/off	None
Flow Control	None

Command Format

When sending a command to this unit, use the following data format:

Header	Length	Command	EoD
1 or 3 bytes	0 or 1 byte	at least 1 byte	1 byte

Header (00h) for power ON command, (77h 88h 99h) for other commands.

Length The total bytes of "Length" and "Command"

Command Designates the command

EoD Designates the end of the data. Fixed to (FFh)

Available Lengths and Commands

Command Header (00h)	Length	Command	Description
Power ON	None	01h	If the projector is in standby mode, this command switch the unit ON.
Command Header (77h 88h 99h)	Length	Command	Description
Power OFF	03h	02h 01hh	If the projector is powered ON, this command switch this unit into Standby Mode. (Directly OFF)
Switch Input	03h	02h 02h	Switch active input to Video (Composite)
		02h 03h	Switch active input to S-Video
		02h 04h	Switch active input to Component
		02h 05h	Switch active input to VGA (sD15)
		02h 06h	Switch active input to HDMI 1
		02h 07h	Switch active input to HDMI 2
Blanking	03h	02h 08h	Toggle projector Blanking ON
		02h 09h	Toggle projector Blanking OFF

Keypad	03h	01h 01h	MENU: Toggle OSD Menu ON and OFF
		01h 02h	UP: Uses as up function key for navigation
		01h 03h	DOWN: Uses as down function key for navigation
		01h 04h	LEFT: Uses as left function key for navigation
		01h 05h	RIGHT: Uses as right function key for navigation
		01h 06h	ENTER: Selects menu item or the next menu
		01h 07h	EXIT: exits the current menu to the previous one.
		01h 08h	SOURCE: Switch input source.
		01h 09h	Power OFF: Turn off the projector (send twice)
12V Trigger #2	03h	03h 01h	Switch the trigger to ON.
		03h 02h	Switch the trigger to OFF
		03h 03h	Switch the trigger to THEATRE
Aspect Ratio	03h	03h 04h	Switch aspect ratio to Standard
		03h 05h	Switch aspect ratio to Full Screen
		03h 06h	Switch aspect ratio to Cinemascope
		03h 07h	Switch aspect ratio to Converted 16:9
		03h 08h	Switch aspect ratio to Virtual Wide
Lens Aperture	03h	03h 09h	Open one level up the Lens Aperture
		03h 0Ah	Close on level down the Lens Aperture
Picture Mode	03h	04h 01h	Switch picture mode to Standard
		04h 02h	Switch picture mode to Dynamic
		04h 03h	Switch picture mode to Theater
		04h 04h	Switch picture mode to User 1
		04h 05h	Switch picture mode to User 2
		04h 06h	Switch picture mode to User 3
Picture Adjust	03h	05h 01h	Show brightness slider (use left or right to modify)
		05h 02h	Show contrast slider
		05h 03h	Show colour slider
		05h 04h	Show hue slider
		05h 05h	Show sharpness slider
		05h 06h	Show black level slider
		05h 07h	Show white level slider
Colour Temperature	03h	06h 01h	Switch colour temperature to Low
		06h 02h	Switch colour temperature to medium
		06h 03h	Switch colour temperature to High
		06h 04h	Switch colour temperature to User
Gamma	03h	07h 01h	Switch gamma to Gamma 1
		07h 02h	Switch gamma to Gamma 2
		07h 03h	Switch gamma to Gamma 3
		07h 04h	Switch gamma to Gamma 4
		07h 05h	Switch gamma to Gamma 5
		07h 08h	Access to Gamma 5 settings (Installer)
Scaling features	03h	08h 01h	Set detail enhancement to Off
		08h 02h	Set detail enhancement to Low
		08h 03h	Set detail enhancement to Medium
		08h 04h	Set detail enhancement to High
Temporal Noise	03h	08h 05h	Set TNR to Off
		08h 06h	Set TNR to Low
		08h 07h	Set TNR to Medium
		08h 08h	Set TNR to High
Mosquito Noise	03h	09h 01h	Set MNR to Off
		09h 02h	Set MNR to Low
		09h 03h	Set MNR to Medium
		09h 04h	Set MNR to High

Block Artifact	03h	09h 05h	Set BAR to Off
		09h 06h	Set BAR to On
Reset to default	03h	0Ah 01h	Reset settings to default value

Examples

You want to...	Command to send
Switch the projector ON	00h 01h FFh
Switch the projector OFF	77h 88h 99h 03h 02h 01h FFh
Switch the projector OFF with OSD confirmation	77h 88h 99h 03h 01h 09h FFh
Change Active Input to Comp.	77h 88h 99h 03h 02h 04h FFh
Display On Screen Menu	77h 88h 99h 03h 01h 01h FFh